

MP Region Project History

As the Nation turned a century old in 1876, the mostly arid West's population began to grow. With it came the need for dependable water supplies to slake the thirst of people, livestock, and crops. Investigations by the U.S. Geological Survey and private parties beginning in the 1880s provided the basis for some of Reclamation's earliest irrigation projects. Here we look back 100 years to see how some of those projects came to be. With it comes a peek into how Reclamation started a "Century of Water for the West" right here in what was to become the Mid-Pacific Region. Early history of the Central Valley Project, the Nation's largest irrigation project, is also included.

Newlands Project History

In the 1840s, early pioneers set out across the "great American Desert" of the Great Plains to settle the west coast of the young United States. For most, the promise of California and Oregon lay ahead, but some settled in western Nevada where the rugged landscape drew farmers to lands near historic rivers for access to irrigation water. Increased agriculture led to increasing demand for irrigation.



Dedication ceremony for the Derby Diversion Dam, June 17, 1905.

In the early 1860s, the first irrigation ditches began to divert water from the Truckee River to irrigate lands in Truckee Meadows. Numerous dams were constructed on the Truckee River to divert water for irrigation or to power mills.



Measuring stream flows on the West Carson River, 1901, in what was to become the Newlands Project.

The United States Geological Survey (USGS) began investigations into possible irrigation projects in the Truckee and Carson

River Basins in the late 1880s. In 1902, the newly organized United States Reclamation Service took over the investigations.

On March 14, 1903, the Secretary of the Interior authorized the Truckee-Carson Project, making it one of the first projects authorized for construction by the Reclamation Service.

Bids for construction of a dam and canal were opened in Washington by the Secretary of the Interior on July 15, 1903. Derby Diversion Dam, completed

in 1905, diverted water from the Truckee River into the 30-mile long main canal which conveyed it to the Carson River.

On June 17, 1905, a congressional delegation led by Senator Francis G. Newlands, sponsor of the 1902 Reclamation Act, dedicated the Derby Diversion Dam and Truckee Canal. Upon the opening of the headgates, water flowed into a Federally controlled Reclamation project for the first time.

Klamath Project History

By 1882, farmers had introduced irrigation to the Klamath area. Several area residents incorporated and dug a low capacity ditch connecting town lots to the Link River, 2 miles above present-day Klamath Falls.

In October 1903, the Oregon District Engineer of the Reclamation Service investigated the Klamath region and recommended a controlling dam at the lower end of Upper Klamath Lake to retain enough water to irrigate 200,000 acres.

Local farmers unanimously supported the project and organized the Klamath Water Users' Association (KWUA) on March 4, 1905. The Oregon and California legislatures and the United States Congress passed legislation to begin the project by early 1905. Secretary of the Interior Ethan Allen Hitchcock authorized the Klamath Project for \$4.4 million on May 15, 1905. The government allocated \$1 million immediately.

Construction started in 1906 with the excavation of 9 miles of the Main Canal, and work on six highway bridges crossing the canal. The Project was faced with scarce and unsatisfactory laborers, whom Reclamation paid \$3.00 for an 8-hour day.



Horses are employed building the Klamath Project's 'A' Canal in April 1906.

Original estimates placed the cost of the project to water users at \$20 a month. In 1908, Reclamation announced it would charge the water users \$30 per month, but the water users balked. On January 25, 1909, the Secretary ordered construction on the Klamath Project suspended. KWUA gave in, and construction resumed.

Studies of the proposed Clear Lake Dam site on Lost River were performed starting in 1905. When completed in 1910, Clear Lake Dam and dikes cost Reclamation \$125,350.

Squirrels caused major problems for the Klamath Project. Squirrel holes in canal embankments caused 11 of 12 breaks in the A and C Canals in 1915, but only three proved serious.



Above, the 'A' Canal headgates of the Klamath Project on June 27, 1907. At right, the headgates in 2002, before demolition to build the new headgates and fish screen project.



Construction activities at Clear Lake Dam in October 1909.

On Stony Creek in the north-central Sacramento Valley — 103 miles north of the city of Sacramento — isolated individual attempts at irrigated farming began before 1880. Two companies built 15 miles of ditches and irrigated almost 500 acres of land. On Stony Creek and its tributaries above Orland, 40 to 50 separate water diversions were built during this period.

Around the turn of the century, the U.S. Geological Survey identified several reservoir sites along Stony Creek and its tributaries. While most locals were skeptical about supporting a large-scale irrigation project, a few Orland residents worked with an area development association to open contacts with the Federal government to request construction of an irrigation project under the new Reclamation Act of 1902.

Immediately after the creation of the U.S. Reclamation Service (USRS)



East Park Dam

in 1902, its managers looked to northern California to create a national reputation in the country's most economically vibrant state. In its first year of operation, the USRS investigated three sites in the Sacramento Valley. A year later, the USRS decided to develop 40,000 to 50,000 acres located on Stony Creek near the town of Orland.

In July 1906, USRS fielded a survey party and a diamond drill outfit along Stony Creek for 4 months. An engineering board in November recommended construction of a dam at East Park, a site 33 miles southwest of the town of Orland in northern Colusa County. The proposed dam would be 115 feet high and capable of holding 26,000 acre-feet of water. The project was provided \$650,000 for construction. Secretary of the Interior James R. Garfield authorized the project on October 5, 1907.

In August 1908, USRS opened 16 bids for construction of the East Park Dam, spillway, and dikes at the Orland Project office. On October 5, 1908, USRS



East Park Dam spillway, 1922

announced the winning bid of \$79,881.65. Most of the East Park's construction and lateral and canals occurred between March 1909 to October 1910. In the spring of 1909, men, machinery, and materials were assembled at East Park Dam and work began on June 11. Although work on many the dam's secondary systems had yet to begin, the first project water flowed in the spring of 1910, and the dam was completed in June of that year.

USRS furnished water to 500 acres of land in and around the town of Orland. Those first to use East Park Dam previously received water from the company ditches dug 25 years earlier.

The graceful curve of East Park Dam is a reminder of the craftsmanship engineers and laborers practiced in Reclamation's first projects.

A 1919 letter from Colonel Robert Bradford Marshall, Chief Geographer for the U.S. Geological Survey (USGS), to California Governor William Stephens, portended the building of one of the greatest irrigation projects in history. Marshall proposed to build storage reservoirs along the Sacramento River system and transfer water from the Sacramento Valley to the San Joaquin Valley via two large canals lying on both sides of the Sacramento River. The plan earned Marshall the nickname, “The Father of the Central Valley Project (CVP).”

Reclamation began planning for the CVP in September 1935 at meetings in Sacramento and Berkeley. Reclamation Commissioner Elwood Mead (Lake Mead, Nevada, was named after him) attended the meeting.

President Roosevelt approved the CVP on December 2, 1935. Construction of the initial CVP units began in October 1937 with the Contra Costa Canal. The entire canal was completed in 1948. First delivery of water was



Construction of the Tracy Pumping Plant under way in 1951.

made on August 16, 1940.

During the late 1940s and 1950s, the government authorized several new CVP divisions. By the end of the 1960s, the Army Corps of Engineers built several dams in California under the Flood Control Act of 1944, several of which were integrated into the CVP.

The 1960s also marked the end of the era of large dam building. Environmental concerns began cropping up in the 1970s, culminating in President Richard M. Nixon signing the Endangered Species Act (ESA) in 1973. The CVP felt the ESA's impact

because of CVP features' impacts on migratory salmon.

The Central Valley Project Improvement Act of 1992 (CVPIA) started the CVP in a new direction. President George Bush signed the bill in 1992, allocating 800,000 acre-feet of CVP water (600,000 in dry years) from Valley farmers toward the restoration of Central Valley fisheries.

The CVP began as the jewel in Reclamation's crown. The project encompasses 35 counties in an area about 500 miles long and 60 to 100 miles wide, making it the largest Reclamation project. The CVP contains some of the country's largest dams, Shasta and San Luis among them.

The Central Valley contains three-quarters of the irrigated land in California, and one-sixth of the irrigated land in the United States. Its annual farm production exceeds the total value of all the gold mined in California since 1848.



Albert McGea, a Reclamation engineering aide, operates a level on the Delta-Mendota Canal's right-of-way in 1951.



A huge bucket of concrete is added to Shasta Dam, circa 1942.